

What is claimed is:

1. A surgical kit for treating incontinence comprising:  
  
an implantable material suitable for a sling procedure,  
  
at least one of a first type of needle suitable for a sling procedure, and  
  
at least one of a second type of needle suitable for a sling procedure, wherein the first type of needle is different than the second type of needle.
2. A surgical kit according to claim 1 wherein the first type of needle comprises a substantially straight needle and the second type of needle comprises a needle with a curved portion.
3. A surgical kit according to claim 1 further including a synthetic insertion sheath associated with the implantable material to form a sling assembly.
4. A surgical kit according to claim 3 further including an adapter for associating the sling assembly with a surgical needle.
5. A surgical kit according to claim 4 wherein the adapter for associating the sling assembly with a surgical needle comprises a dilator.
6. A surgical kit according to claim 1 wherein the first type of needle comprises a needle with at least two handles.

7. A surgical kit according to claim 1 wherein the first type of needle includes an end portion with a passageway for receiving a suture.

8. A surgical kit according to claim 7 wherein the passageway for receiving a suture comprises a hole.

9. A surgical kit according to claim 1 wherein the first type of needle comprises a movable inner member with a blunt end portion having a suture passageway and an outer sheath member with a sheath end, and

means for moving the blunt end portion between i) an extended position with the suture passageway extending beyond the outer sheath member, and ii) a retracted position with the blunt end portion spaced closer to the end of the outer sheath member than in the extended position.

10. A surgical kit according to claim 9 wherein the sheath end comprises a substantially sharp surface for cutting tissue, and the first type of needle includes a means for locking the blunt end portion in the extended position.

11. A surgical kit according to claim 1 wherein the first type of needle includes at least two straight portions situated at a predetermined angle.

12. A surgical kit according to claim 1 further comprising a first type of handle and a second type of handle wherein the first type of handle is different than the second type of handle.

13. A surgical kit according to claim 1 wherein the first type of needle is larger than the second type of needle.

14. A surgical kit according to claim 1 wherein the first type of needle includes a bladder perforation detector.

15. A surgical kit for treating incontinence comprising:

a first type of sling material for implanting during a sling procedure,

a second type of sling material for implanting during a sling procedure,

at least one needle that is sized and shaped for inserting a sling material.

16. A surgical kit according to claim 15 wherein the first type of sling material is a synthetic sling material and the second type of sling material is a non-synthetic sling material.

17. A surgical kit according to claim 15 further including a universal adapter for associating a sling material with the needle.

18 A surgical kit according to claim 15 wherein the universal adapter comprises a compression collet.

19. A surgical kit according to claim 15 further including a means for constructing a sling from the first type of sling material and the second type of sling material.

20. A sling assembly for implantation without bone anchors, the sling assembly comprising:

a synthetic surgical mesh having first and second ends and a plurality of holes that are sized and shaped to afford tissue ingrowth, the synthetic surgical mesh being sized and shaped to be implanted during a surgical sling procedure,

a removable synthetic insertion sheath situated about the surgical mesh,

at least one suture operatively associated with the surgical mesh and extending beyond the first end of the surgical mesh a length sufficient to afford associating the mesh with a needle, and

at least one other suture operatively associated with the surgical mesh and extending beyond the second end of the surgical mesh a length sufficient to afford associating the mesh with a needle.

21. A sling assembly according to claim 20 wherein the insertion sheath defines an interior portion that includes the surgical mesh, and an exterior portion, and the suture extending beyond the first end of the surgical mesh extends from the interior portion of the sheath to an exterior portion of the sheath.

22. A sling assembly for implantation without bone anchors, the sling assembly comprising:

a synthetic surgical mesh having a plurality of holes that are sized and shaped to afford tissue ingrowth, the synthetic surgical mesh being sized and shaped to be implanted during a surgical sling procedure,

a removable synthetic insertion sheath situated about the surgical mesh and having first and second ends,

at least one suture operatively associated with the insertion sheath and extending beyond the first end of the insertion sheath a length sufficient to afford attachment of the sling assembly to a needle, and

at least one other suture operatively associated with the insertion sheath and extending beyond the second end of the insertion sheath a length sufficient to afford attachment of the sling assembly with a needle.

23. A sling assembly according to claim 22 wherein the insertion sheath defines an interior portion that includes the surgical mesh, and an exterior portion, and the sutures extending beyond the first and second ends of the insertion sheath are completely situated on the exterior portion of the sheath.

24. An article for use in a surgical sling procedure, the article comprising:

a body portion having first and second opposite end portions,

the first end portion having surfaces for associating the article with a needle, and

the second end portion having a sling associator for associating the article with a sling.

25. An article according to claim 24 wherein the sling associator comprises a hole.

26. An article according to claim 24 wherein the sling associator includes a slot for receiving a first or a second type of sling or sling assembly and a securement means for securing the first or the second type of sling or sling assembly to the article.

27. An article according to claim 24, wherein the sling associator comprises jaws movable from an open position for receiving a sling material to a closed position that firmly retains the sling and that resists separation of the sling from the article.

28. A surgical kit assembly comprising:

a sling assembly comprising a sling mesh material and an adapter, the adapter having an end portion having a passageway,

a first type of needle having first and second end portions, at least one of the end portions being sized and shaped to engage complementary surfaces in the passageway of the end portion of the adapter to associate the needle with the sling assembly, and

a needle converter having a first end portion having surfaces that are sized and shaped to engage complementary surfaces in the passageway of the adapter to associate the needle converter with the adapter, the needle converter having a second end portion, opposite the first end portion, which second end portion has a means for attaching the needle converter to a second type of needle that is different than the first type of needle.

29. A needle converter for use in a surgical sling procedure that utilizes a dilator for use with a first type of needle, the needle converter comprising:

a body portion,

a first end portion having surfaces that are sized and shaped to engage complementary surfaces in a passageway of a dilator to associate the needle converter with the dilator,

second end portion, opposite the first end portion, which second end portion has a means for attaching the needle converter to a second type of needle that is different than the first type of needle.

30. A surgical kit assembly comprising:

a first type of sling material for implanting during a sling procedure,

at least one needle that is sized and shaped for inserting a sling material, and

sling assembly means for affording construction of a customized sling from the first type of sling material and a second type of sling material.

31. A surgical kit according to claim 30 wherein the sling assembly means comprises a grommet constructed from a biocompatible material.

32. A surgical sling procedure comprising the steps of:

providing a kit comprising a first type of sling material for implanting during a sling procedure, and a sling assembly means for affording construction of a sling from the first type of sling material and a second type of sling material,

constructing a sling by selecting at least a portion of the first type of sling material and a second type of sling material and by associating the selected first type of sling material with the second type of sling material, and

implanting the constructed sling.

33. A surgical sling procedure according to claim 32 wherein the step of providing a sling assembly means comprises the step of providing a mechanical fastener to attach the first type of sling material to the second type of sling material.

34. A surgical sling procedure for treating incontinence comprising the steps of:

providing a surgical kit having a first type of sling material for implanting during a sling procedure, a second type of sling material for implanting during a sling procedure, and a surgical instrument for implanting a sling material,

selecting the first type of sling material or the second type of sling material from the surgical kit, and

implanting the selected sling material with the surgical instrument.

35. A surgical procedure according to claim 34 where in the step of providing a first type of sling material comprises providing a first type of polymeric sling material, and the step of providing a second type of sling material comprises the step of providing a second type of polymeric sling material that is different than the first type of polymeric sling material.

36. A surgical sling procedure for treating incontinence comprising the steps of:

providing a surgical kit with an implantable material suitable for a sling procedure, at least one of a first type of needle that is sized and shaped for inserting a sling, and at least one of a second type of needle that is sized and shaped for inserting a sling, wherein the first type of needle is different than the second type of needle,



selecting the first or the second type of needle, and  
implanting the implantable material using the selected needle.

37. A method of implanting a sling to treat urinary incontinence in a patient comprising the steps of:

providing a surgical kit comprising at least one guide needle, and at least one sling transport needle with a tip, a sling attached to the sling transport needle, and an adapter having tip receiving surfaces for receiving the tip of the sling transport needle,

creating at least one vaginal incision,

creating at least one suprapubic incision,

initially passing the guide needle through the suprapubic incision and then through the vaginal incision,

attaching the adapter to the needle,

placing the tip of the sling transport needle in the tip receiving surfaces of the adapter, and

guiding the sling transport needle from the vaginal incision to the suprapubic incision with the guide needle to implant the sling.

38. A surgical kit for treating incontinence comprising:

at least one guide needle,

at least one sling transport needle with a tip, and a sling attached to the sling transport needle, and

an adapter having tip receiving surfaces for receiving the tip of the sling transport needle and having means for attaching to the at least one guide needle.

39. A surgical kit according to claim 38 wherein the adapter is integral with the guide needle.

40. A method of treating incontinence in a female patient comprising the steps of:

providing a synthetic surgical mesh having first and second ends and a plurality of holes that are sized and shaped to afford tissue ingrowth, and a removable synthetic insertion sheath situated about the surgical mesh,

extending a first suture through the surgical mesh and beyond the first end of the surgical mesh,

extending a second suture through the surgical mesh and extending beyond the second end of the surgical mesh,

creating at least one vaginal incision,

creating at least one suprapubic incision,

passing a leading end of a needle initially through a suprapubic incision and then through the vaginal incision on one side of the patient's urethra,

passing a leading end of a needle initially through a suprapubic incision and then through the vaginal incision on the other side of the patient's urethra,

attaching the first suture to the leading end of a needle on one side of the patient's urethra,

attaching the second suture to the leading end of a needle on the other side of the patient's urethra,

implanting the sling by moving the leading end of a needle from the vaginal incision toward a suprapubic incision, and

then removing the synthetic insertion sheath.

41. A method of treating incontinence in a female patient comprising the steps of:

providing a synthetic surgical mesh having a plurality of holes that are sized and shaped to afford tissue ingrowth, a removable synthetic insertion sheath situated about the surgical mesh and having first and second ends,

associating a first suture with the insertion sheath and extending the first suture beyond the first end of the insertion sheath,

associated a second suture with the insertion sheath and extending the second suture beyond the second end of the insertion sheath,

creating at least one vaginal incision,

creating at least one suprapubic incision,

passing a leading end of a needle initially through a suprapubic incision and then through the vaginal incision on one side of the patient's urethra,

passing a leading end of a needle initially through a suprapubic incision and then through the vaginal incision on the other side of the patient's urethra,

attaching the first suture to a leading end of a needle on one side of the patient's urethra,

attaching the second suture to the leading end of a needle on the other side of the patient's urethra,

implanting the sling by moving the leading end of a needle from the vaginal incision toward a suprapubic incision,

cutting end portions of the sling mesh and synthetic insertion sheath to separate them from portions implanted in the patient, and

removing a remaining portion of the synthetic insertion sheath from the surgical mesh.

42. A surgical kit for treating incontinence comprising:

an implantable material suitable for a sling procedure,

a needle that is sized and shaped for inserting a sling, the needle having surfaces for engaging a handle, and

at least one of a first type of handle having surfaces for attaching the handle to the needle, and

at least one of a second type of handle having surfaces for attaching the handle to the needle, wherein the first type of needle is different than the second type of needle.